

The enclosed information should allow you to make "J" antennas for any band. I have made several of each configuration with 100% results.

First determine the installation requirements, e.g. if it is to be a base station antenna, you might consider making the elements out of 1/2" copper pipe, soldered together (see Figure 1). If copper pipe is used, no spacer is required because of the rigidity of the elements. I have one of these up right now and it works super.

If for mobile application, consider the 1/8" or 1/4" wire spaced with a piece of drilled PVC. These work excellent also. Dimensions are included in Figure 2.

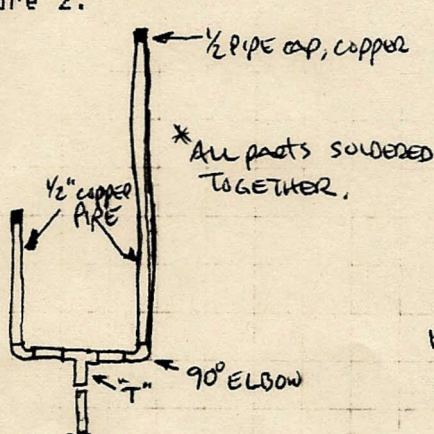


Figure 1.

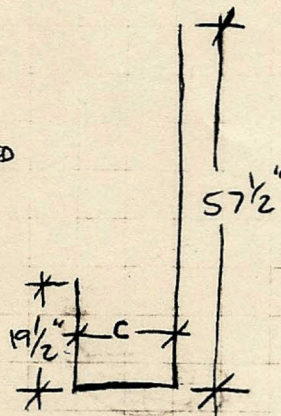


Figure 2.

For 1/8" wire:
C = 1"

For 1/4" wire:
C = 2"

*EXAMPLE IS FOR 2M ANTENNA

What ever the materials, following formula should be used to calculate the distance between elements (see Figure 2):

$$A \text{ (feet)} = .24 \text{ wavelength}$$

$$B \text{ (feet)} = .71 \text{ wavelength}$$

To determine wavelength in feet: divide by the frequency in MHz by 984.

EXAMPLE: $984/146\text{MHz} = 6.74 \text{ feet} \times 12 \text{ inches} = 80.88 \times .24 = 19.4"$ for A

$C = (16 \times D)$ divided by 2, where D = diameter of element

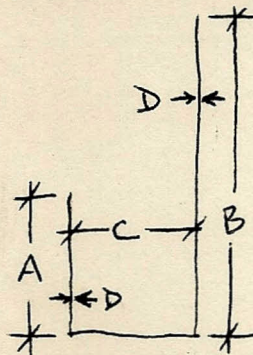


Figure 3.

Antenna is fed with a 4:1 balun: see details on back >>>>

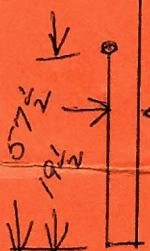
"J" ANTENNA

2 meters

145-147 MHz

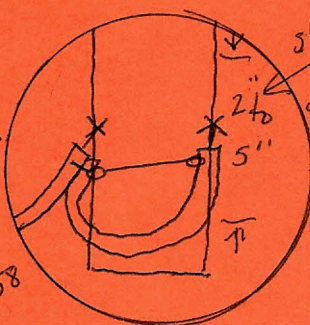
Developed by WAINAP/6

Buzz
Monterey Naval Post Grad
School - 1973



← 1" for 1/8 wire or rod
2" for 1/4 tube for rod.

Details of Feed & Balun attachment



50W Feed line RG-8 or RG-58

Below Details (RG-58 only)

